G. S. WEIMER.

TURNBUTTON FASTENER,

APPLICATION FILED AUG. 11, 1921.

1,412,097. Patented Apr. 11, 1922.

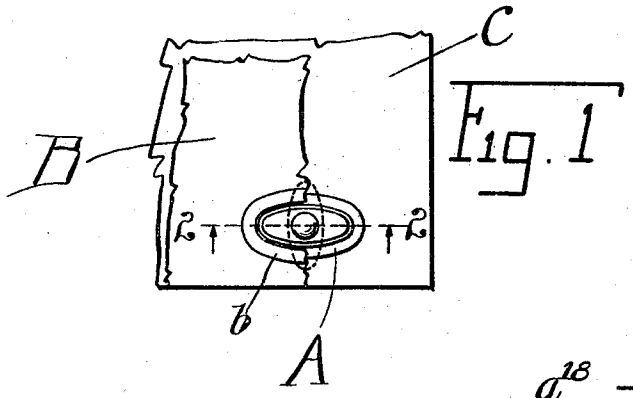


Fig. 1

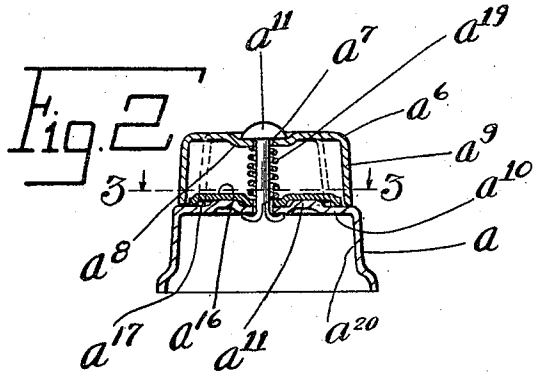


Fig. 2

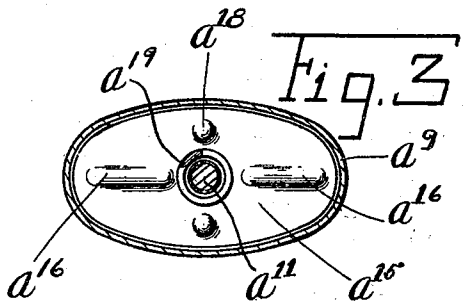


Fig. 3

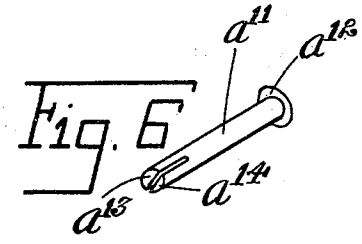


Fig. 6

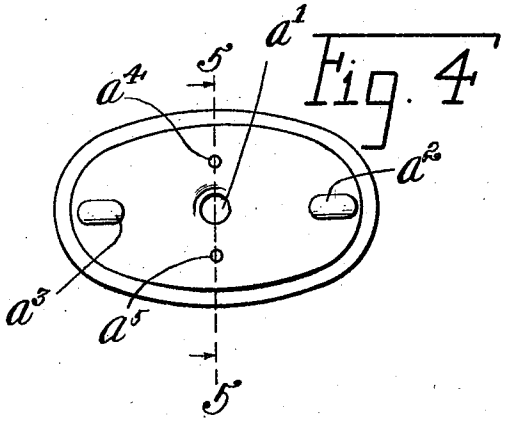


Fig. 4

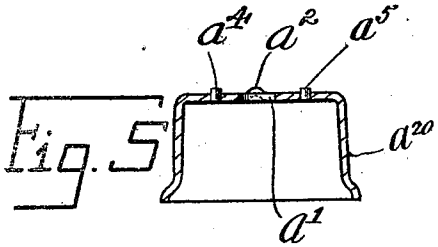


Fig. 5

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TURNBUTTON FASTENER.

1,412,097. Specification of Letters Patent. Patented Apr. 11, 1922.

Application filed August 11, 1921. Serial No. 491,385.

To all whom it may concern:

Be it known that I, GEORGE S. WEIMER, a citizen of the United States of America, and a resident of Augusta, in the county of Bracken and State of Kentucky, have invented a new and useful Improvement in a Turnbutton Fastener, of which the following is a specification.

This invention relates to a fastener or turn button of the kind commonly used for fastening the curtains of vehicles. The invention consists in various novel features of construction hereinafter described.

An object of my invention is to provide a device of the class described wherein the yielding resistance employed in this sort of a device is more adequately protected than are the corresponding elements in devices known to me up to this time.

Another object of my invention is to provide means to be employed with a device of this kind adapted to positively secure the parts thereof in positions for the releasing therefrom or mounting thereon of a curtain.

These and other objects are attained by the means described herein and disclosed in the accompanying drawings, in which

Fig. 1 is a plan view of a fastener embodying my invention.

Fig. 2 is an enlarged sectional view of a fastener taken on line 2—2 of Fig. 1.

Fig. 3 is an enlarged sectional view on line 3—3 of Fig. 2.

Fig. 4 is an enlarged plan view of a base forming a detail of my invention.

Fig. 5 is a sectional view on line 5—5 of Fig. 4.

Fig. 6 is a perspective view of a pin forming a detail of my invention.

The fastener A of my invention is mounted on a standard C in any suitable manner and consists of a base a and a cap a^6. The base comprises a shank a^{20} of an oval cross section supporting the top a^{10}, which top has a central perforation a', on the opposite sides of which perforation and extending in the direction of the longitudinal center line or major axis of the top a^{10}, are formed the upwardly projecting ridges a^2 and a^3. Upon the transverse center or minor axis extending through the slot a' and spaced on opposite sides of said slot, are the upwardly projecting pins or lugs a^4 and a^5 which, if desired, may, in the nature of bosses, be raised upon the top. A cap a^6, having a central slot a^7, has a depressed portion a^8 formed about said slot a^7 and has a shank a^9 of oval cross-section supporting the upper wall of said cap and which upper wall carries the said depression. The lower end of the side or shank of the cap is adapted to lie immediately over the top a^{10} of the base. The shanks of the base and of the cap are both oval in construction in order to secure the curtain B by turning the cap after passing same through the grommet b on the curtain. Cotter pin a^{11}, having a head a^{12} at one end and having its other end slitted whereby two lugs a^{13} and a^{14} are formed, extends through the slots in the cap and in the base. The lugs are turned upon themselves so as to preclude separation of the base and cap. An oval plate a^{15} is reciprocally mounted upon the pin intermediate the tops of the base and cap, and has formed in it a pair of upwardly projecting ridges a^{16}, whereby there is formed in its lower surface the grooves or notches a^{17} adapted to accommodate the ridges a^2 and a^3. Upwardly struck knobs a^{18} are formed upon the plate, whereby notches are formed in the lower surface of the plate adapted to accommodate the pins a^4 and a^5. A spring a^{19} is mounted upon the pin a^{11} and its opposite ends abut the cap and the plate.

The head a^{12} of the pin a^{11} forms a closure precluding the entry of water into the cap. The spring a^{19} yieldingly positions the cap upon the base. The plate a^{15} provides a closure adapted to protect the spring a^{19}. The plate, in combination with the spring and the lugs formed on the base, serve to lock the base and cap in either of two positions, one where the cap extends transversely of the base and the grommet is precluded from leaving the base, and the other where the walls of the shanks extend in substantial alignment, at which time the grommet may be separated from the fastener.

What I claim is:

1. In a fastener of the class described the combination of a base having a perforation therethrough, upwardly struck lugs on the base and disposed on opposite sides of the perforation, a cap having an oval shape and having a central perforation therethrough, a pin having a head formed at one end and having a slit through the other end whereby lugs are formed at the second end thereof, the pin extending through the perforations

in the base and cap and having the head in engagement with the cap and having the lugs thereon turned upon themselves so as to engage the base, whereby separation of the base and cap are precluded, a plate mounted on the pin having upwardly extending grooves in its undersurface adapted to accommodate the lugs on the base, and a spring mounted on the pin abutting the plate and the cap and retaining the plate in yielding engagement upon the base.

2. In a fastener of the class described the combination of a base having a slotted top, a cap having a shank and an oval top, the top of the cap having a central slot and a depression formed about said slot, the slot being in alignment with the slot in the base, a cotter pin extending through the slots revolubly mounting the cap on the base, and having at one end a head adapted to seat in the depression in the cap and being slit at its other end whereby lugs are formed on the cotter pin, a plate mounted revolubly on the cotter pin engaging the cap and adapted to revolve therewith, a spring contained within the cap abutting the plate and the cap, the plate and base having cooperating ridges and notches adapted, in cooperation with the spring, to yieldingly resist relative movement of the base and plate, the lugs on the cotter pin being bent upon themselves and clamped upon the inside of the top of the cap.

3. In a fastener of the class described the combination of a base, a plate and a cap of oval shape having aligned perforations, the base having ridges formed on its longer diameter, said ridges being spaced on opposite sides of the perforation in the base, at a distance in excess of the shorter diameter of the cap, pins on the base disposed on the shorter diameter of the base, the plate having notches on its longer and shorter diameter, the longer groove being adapted to accommodate the ridge and pins, and the shorter groove being adapted to accommodate the pins, and means extending through the perforations adapted to preclude separation of the base, plate and cap.

In testimony whereof, I have hereunto subscribed my name this 6th day of August, 1921.

GEORGE S. WEIMER.